

News Spectrum

COMPANY NEWS

FOSS NIRSystems Inc. (Laurel, MD) recently announced that Jim Jouron has joined as Midwestern Regional Account Manager. Based out of Crystal Lake, IL, Mr. Jouron will have sales responsibility for 12 Midwestern states as well as Ontario, Canada.

► **Avantes BV - Netherlands** announces that it is expanding its sales and service capacity with a subsidiary in Chaoyang District Beijing, China, which will be known as Avantes China. Avantes believes that this will enable them to serve their Chinese customers more quickly and increase market penetration with their line of products for fiber-optic spectroscopy, including spectrometers, light sources, software, fiber-optic cables and probes, accessories, and fiber-optic sensor systems. Henry Zhang will act as managing director of Avantes China.

► **Waters Corporation** (Milford, MA) announces that it will work with **Applied Biosystems/MDS SCIEX** (Foster City, CA) to develop Waters ACQUITY UPLC System software controls for use with Applied Biosystems/MDS SCIEX's Analyst software. The companies hope that greater operational integration and connectivity of the two instrument platforms translates into a higher level of efficiency and productivity for scientists using a Waters ACQUITY Ultra Performance LC System connected to a mass spectrometer from Applied Biosystems/MDS SCIEX.

"Scientists have seen the unique advantages of using UPLC with mass spectrometry to increase throughput

and performance and we are very pleased to now work with Applied Biosystems/MDS SCIEX to offer UPLC as a fully supported LC inlet to the Applied Biosystems/MDS SCIEX family of mass spectrometers," said Rohit Khanna, vice president of worldwide marketing for Waters Corporation.

► **Waters Corporation** (Milford, MA) also announces that it has acquired all of the outstanding capital stock of privately held Thermometric AB (Jarfalla, Sweden), a manufacturer of high-performance microcalorimeters, for approximately \$2.5 million. Waters plans to merge the acquired business into its TA Instruments Inc. (New Castle, DE) operation.

RESEARCH

Scientists at the **Department of Energy's Pacific Northwest National Laboratory** (Richland, WA) have expounded upon the historic research that uranium salts give off a fluorescence spectra under ultraviolet light by applying cryogenic fluorescence spectroscopy to uranium in contaminated soil. The sediments were cooled to minus 267 degrees Celsius, at which point a sample was hit with a UV laser to reveal a uranium fluorescence intensity of more than five times that of room temperature. As a result, more spectra were visible and different forms of uranium were able to be distinguished. ■

Market Profile: Lifetime Fluorescence

Lifetime fluorescence is a significant niche market within the larger category of fluorescence spectroscopy. Although the current scope of application is fairly limited, the potential is quite significant. The range of competition in this area is fairly small, but is expanding.

In contrast, with conventional fluorescence, which analyzes the intensity of the fluorescent response of a sample, lifetime fluorescence measures the average time it takes for fluorescence to return to the ground state. The advantages over conventional fluorescence include consistency of fluorescence lifetimes and the ability to characterize the environment of an analyte.

The major applications for lifetime fluorescence currently are found in biological analysis and clinical diagnostics. Lifetime fluorescence also is used in conjunction with microscopy and imaging applications in the areas of biology and medicine, which often is referred to as fluorescence lifetime imaging microscopy (FLIM). Other fields of applica-

tion also are being explored in such diverse industries as semiconductors, coatings, cosmetics, and materials.

Horiba, which has built up its Jobin Yvon business with the acquisitions of the SLM-Aminco business in 2000 and IBH in 2003, is the clear leader in fluorescence lifetime instrumentation. Photon Technology International (PTI) is also a major competitor. The total market for lifetime fluorescence spectroscopy is estimated to be about \$22 million in 2006, with annual growth in the 3%–4% range.

The foregoing data were extracted from SDI's market analysis and perspectives report entitled *Edition Global Assessment Report, 9th Edition: The Laboratory Life Science and Analytical Instrument Industry*, September 2006. For more information, contact Stuart Press, Senior Consultant, Strategic Directions International, Inc., 6242 Westchester Parkway, Suite 100, Los Angeles, CA 90045, (310) 641-4982, fax: (310) 641-8851, www.strategicdirections.com.

Worldwide lifetime fluorescence vendor share, 2006

